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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

January 22, 2002

Mr. Anton C. Marek, P.E.
Manager, Site Remediation
Cytec Industries, Inc.
5 Garret Mountain Plaza
West Paterson, NJ 07424

Re: U.S. Titanium Superfund Site
Railroad Right-of -Way Evaluation Report

Dear Mr. Marek:

EPA has completed its review of the above referenced report prepared by Wiley & Wilson, dated December 6, 2001. The following comments and questions are offered for your consideration:

1. It is recommended that a Work Plan and project schedule be prepared which specifically addresses the proposed remediation of acidic soil in the railroad right-of -way drainage ditches and the ditch to the southwest of Area 1 which flows through the wetlands.
2. The extent and volume of acidic soil requiring remediation should be determined and presented following additional sampling to determine appropriate lime application rate.
3. The suggestion that the contamination is residual in nature based upon the interpretation of results from one sample location (No. 21) is unclear. Is this location considered representative of soil conditions throughout the investigation area?
4. The statement on page 8, first paragraph, that "...readings seem to indicate the groundwater has been providing some flushing of residual iron and acidity from the location sampled" is unclear and requires further explanation. Is this suggested solely because total iron and acidity readings are higher in the deeper sample (21B) as compared to the shallower sample (21A)?
5. The discussion on page 8, second paragraph, regarding the determination of final lime application rates is somewhat confusing. The example is given of locations 3 and 5 where total acidity readings are similar and therefore, samples will be collected at 50 foot intervals and composited to determine the final rate. If results aren't similar, does the sampling methodology change? In other words, does the sampling interval change and are discrete as opposed to composite samples collected?



6. The approach for determining the final lime application rate in the drainage ditch located southwest of Area 1 which flows through the wetlands north of the railroad right-of-way should be presented.
7. It is indicated that the final rate will be the average of the predetermined rates for the discrete sections tested. Will the predetermined rates be estimated on the basis of mixing results for each individual location? This matter requires further clarification.
8. At each location, samples were collected at depths of 6 and 18 inches, yet lime will be mixed into the soil to a proposed depth of only 12 inches. The basis for the selection of the 12 inch and not the 18 inch depth, should be explained.
9. It is not clear whether the lime will be applied to the soil manually or using automated equipment such as a rototiller. Please explain.

This concludes EPA's review of the above referenced report. Please respond to this letter within thirty (30) days of receipt. If you any questions regarding the letter or need additional time to prepare the response, please contact me at (215) 814-3232.

Sincerely,



Philip Rotstein
Remedial Project Manager

cc: Wayne Lewis, Wiley & Wilson
Thomas Modena, VDEQ

